Mott Journal #4 [PN-80-07-14]

This is the fourth of six pocket notebooks used by Charles P. Mott, a member of the office staff at Menlo Park, to record daily activities at the laboratory. The entries from these notebooks were used as the basis for more extensive entries recorded by Mott in Menlo Park Notebooks #53 and #117. This pocket notebook covers the period July-September 1880. The front cover is labeled "153" and is inscribed "C. P. Mott No. 4 May 14. 80 to Septr. 23. 80." The pages are unnumbered. Approximately 70 pages have been used.

PN 8.01.01.14
E32

Copied by King - to Dingwall
Pioneer

Folio 100 - 83

Wednesday July 11th, 1883

Anchored in the Inner Harbour this morning, being off at seven bells. Near on land, from Stow, since May 17.

Visited Mr Johnson & Brown aboard Triloon, side on a big pontoon, moored. He drove the engines home, after dressing, from one to three o'clock by Tiffin.

Calibrations - Calibrations tested made by Mr Upton Bros No 103 page 21 on Cambs made related in Calibration minutes on the back lamp - broken in Mr Onslow's room on screwing on sand. 1 hr - 41 M - ch 44.2 M.

Calibrations - some back sextons adjusted with the top of the table, thence Amesmia & Aldrich & Sailingquet, Longitude 0.20 to 1.79 [illegible] on land Tuesday, and tested by Mr [illegible] Mr Langstaff Bros No 95 page 25 No 57 Hours 1559 hrs

Mr. Bailey getting out some Bamboo
poles made his exp. my expense & got
out in frames now in use.

Photographs of Shoshoka of Otter Lodge
Mine received and discussing means
of applying electric motors to pumps
for use in deep mines. Rock Mine now
working nearly 3000 feet below surface.

Thursday July 15

Our separation glass broke with two purpose
pieces of tubing across mouth for St. Mary
to continue experiments on the separation.

Returned Mr. Clarke from vacation since
July 2.

R.R. gradetrain at noon by some
of the boys. brake chain broke and
boys jumped off except Hodgman
he got hurt some and our brake
pulley was torn up.

Lodge, Mr. Batcher painting pieces of some
bamboo lodge before carbonization.

Frames for Bamboo shrinkage. 20% shrink
and dimensions Book No 102 page 21. Carpenters
making the frames.

Visitors. Mrs. Palmer & Mr. Parker Washington D.C.

Experiments to start lamps all down but
not all connected commenced May 1st 80.

Gas works. Gas apparatus for works at
Ramsey Factory received from Robinson &
Price. " " Coal works Day & day.

Friday July 16

Mr. Clarke goes to Philadel.

Lodge Stanley hand pump for
Drew received this A.M.

Insulating tracks commenced painting.
Tracks felt under R.R. Rails to insulate

Cementation tested by Mr. Upton Brooks
10 stages 145. 18 hours heavy wire to wire
55 ohms Resistance 25.4.43. Cameron
Nickel wire to wire 14 grained. 1.4.45 =
Cementation " ... 61.8 " 25.6.5.25
Cameron line " ... 16 " 5.8.4.54

Wood Miller Dean got machine cutting
the traps clean to-day, and commenced
work on the saw for sawing mains, sig.
Mr. Edison, instructed Minister to go in
on sea and prepare for making the
screwing cramp machine. Wire 3 Connd.

Visitors to large party of Friends gested
Also one of the London Telephone Mess
and a Man with Rail Road Model, pow

Acid Corrugation - Mr. Hutchinson to prepare
for Recorrugation some cartons by
dipping them in the sperm and chemical
solution of sperm

Saturday July 17.

Cementation process Commenced with bits
formed to give 55 ohms resistance
finished by Friends.

Albertus Newby & Cameron have been
so representing full knowledge of Mr. E.E.
Mining resources and applying for
Mines to work

Lamps 1277 Nitrous Bamboo & Nickel clamp
Ten down 5 Minutes at 3 cents 40 cents

Visitors Bussar, one Ton of Steel.
" Plan wire sent by Mr. Jones to determine
Conductor Metal at work on stem at
Mines in Pit
Play link 25 ohm circuit tested & Wire
efficiency no improvement

Wood Grind at Men at Klaproth's and
on Mower at Lamp factory finished 18
Staging of cementation, Dean & Wood, Miller
finished and tested, gas & Edison finished
Warren entering Minutes at Cartons
Pearson & Upton at Menlo & Factory Parlor

Monday July 19

Spanish Friends, Mother and wife with me in
Grosvenor stat. on meet bringing, guitar &c.

Carlton Palace, this week showing Mr Wilson
Foster and his Sheffield fame after
9 p.m. 9 inc. Stalls from 4/- to 1/-
Unlimited invited. Not encouraging,
Boots at 1 p.m. 25 - 30 - Lady &c.

Mining Statistics of some separating
Gravels &c. made and tried. Books
No 108 page 294. Black Sands, Nil &c.
Results on Film.

Bombay Bar given Bradley from Wheat
& cash Lime Lotos, Hot Parsnips
and Sour Calcutta Sandes

Tar Lotos proves a good iron
Conductor Book No 103 page 188

Visited a gentleman connected with
Metropolitan Mining and R.R. of
Lindsay. Mr Blackwell of Nevada.

July 19

Magnetic Separator commenced
Work on frame for practical working the
system of Magnetic Ore Separation

Mighty Force Engine has not been running
after six o'clock since Friday last

Rail Insulation Report idea given by Mr E.
Gill & later discussed to whole theme &
Many suggestions of his own for trial on
the electric road.

Bash pounder Book 103 page 188 &c. 7/2 &
102.65 ohm - P.G. 103.25 ohm. 88 C. 102 ½
114 C 100.6 - 175 C - 99.150 - 114 C 89.40
88 C. 288 ft Wasper cable

Tuesday July 20. 1880

Track tak. Book 187, page 77 Between tracks
Chimes, disconnected at end of incandescent walls, Sat. use 112 ohms paper 1.2 u.s.

Clamp Machine. description of Imp. on Model by Mr. Batchelor Book 103 p. 23.

Gem Factory. sic mens sanking floor under pressing pumps. Dongla pump prepared for boiler and main.

Small Engine, taken apart and prepared for shipment, from Gem Factory

Filter Presses, Lean making 1 for each side on edge in place. It is secured on trench so thereby having two hands for placing the material, saw saw out of way

Water Engineers at work to siamese water main Pipe and new 20 cleaning it out.

Gas Calcining furnace, received and ready for gas when shipped

Mullan, Coadana & Lowry visit friend.

Electric Mr. Edison sketched additions for washing rec. and gave to Mr. Force to make the apparatus to Exp.

Wednesday July 21.

Paper Exp. tested. 1 u.u candle lasted 8 hr. showing an unfavorable comparison with Bass & Bambo. 1 c.p. 112 ohm 8.2 Book No 182 p. 21 etc.

Elec. Eng. Dr. Castle days in investigation and study of system design of simplex electric incandescent. and also on Rail insulation Book No 115 pg. 1 etc.

Gas. Mr. Mann commenced putting new gear on elec. Exp. motor

Bank. Mr. Batchelor went to N.U. 112 to see family off to Europe

Arrange of Bass & Bambo (Jersey) co for tests. Return 2 cases from G. Mallett by Mr. Book No 112 pg 74.

Bamboo [illegible] Two lamps exhausted and tested (3)

Reverse Current. Bamboo lamps [illegible] at [illegible] reverse current 11 min, Best Rev. [illegible] 20 Minutes Book No 103 page 257.

Magneto call, Bergman worked through 10,000 ohms Blake through 1200,

Carbon tester, Mr. Edison suggests bringing the loops to detect soft spots & illustrate an attachment, for a Geisler Pump, in [illegible] carbons may be heated and defects noted bad ones rejected, without cost of putting in lamps, 30 carbons tested at a [illegible] Book No 102 page 37[illegible]

Thursday July 22

Dynamometer Open car 16 lbs to start [illegible] cars open and top. 64 lbs [illegible] to keep both moving. 40 lbs even running on current – to move engine, 86 lbs – to keep [illegible] running 64 lbs

July 22

Japanese Bamboo two lamps tested at 44 candles – 15 & 20 minutes Book 103 page 263 &c. Summary of tests Book 112 page 9

Carbonization some loops of white [illegible], [illegible] [illegible] Tulips (Amaranth) cut by Bradley in [illegible] formers on amaranth came out very nicely.

Gear Man cutting arm and clutch gear on electric locomotive

Track, between rails – 4.8 ohms – 13 volts 30 volts no perceptible difference

Water. Heavy rain last night and to-day stopped all further work at the pond for the present.

Fiber former completed by Dean adding a frame on hinge to drop over on fiber and press it evenly in the formers.

Friday July 23.

Papers New York Herald, published this morning a long description article on the Edison Electric Road and its adaptability to elevated roads.

Rail Insulation nails letter this A.M. 8 o'clock
Two nails laid down near Laboratory for experimenting on brass insulation.

Daily Graphic Artist looking photos of electric cars.

Small Boy from Gen'l Factory delivered H. Henderson Mich.

Bamboo Cross. 48 candle. burned 68 hr. Blue in this lamp disappeared after burning about minutes but not returned
Time Book 1 Page 112
Book 1 Page 112

Pl. Drawings showing various forms for fastening a pinnacle to molecular electric motors & dynamos, for placing rows of carbons. New
Pat Office accepts New Serial & not entitled
Princess Fox Island. Mohawk on meeting with

Saturday July 24

Papers received to day have news another article on the Edison electric locomotive

Engineering Journal Review Lect. on Fast Locomotives

Best fiber tire bandage from Baltimore used.

Lamp Cinn. Hickman commenced insulating metals with Lined Mattress.

Filer primer, frame not stiff enough to support the necessary pressure. Dean commence making model for new frame & different stiles lower.

Embossing frame. Andrews making with new sensitive cloth & chemicals or chloride for blueprinting.

Urent general, Men repairing gas fixtures in [illegible] Engineering Journal posters.
Go Wonderful for Amt clutch motor Pickslum, Charles on electric locomotive

Monday July 26.

Carbon sent in persons to Palatine
Lock Cutter off at clamp, carbon fast
now, and after heating for some time
broke in glass, carbon embedded
upward half way on it times to burn,
Tuesday Drawing. Saturday. Pairing lamp at
K.C. 14.58 ohms 14 volts. This Morning fast
at 350 Ohmmeter. 7.2 ohmes Lasted
13 min. 50 for 1 hr. for 1 candle. 700
candles per H.P. pair of Platina sim
ilar to this in same white fire filament
K carbon and Bowman from to gen. in
Lecture Nr. Platina Bark in oil two heatings
14.50 ohms. 8.15 ohms. 8.33 volts 8.75 per H.P.
Bottle 13 page 53 c.

Chart for Ammeter the Accumulator
Kennedy's brass cut out. 50 ohm. made
Mr. Clark. Ammeter by Clark. Bottom of
Glass Tube. Ammeter to Dynamo second
from. For leading to furnaces

Glass Separator put up at the expense of
Kennedy Engine house.

Visited Newton Heath Rec. & Mrs. for Rec.
R.R. sights. Prestwich & Grimes, Bolton

Dynamo two pounds shoving contact broke
carbon and wire,

Lamp with short piece carbon on clamp
Gas passed through globe carbon piece
sufficiently near to arc to burn.

Gilchrist Samuel Ebrian left for
York Christmas

Rev. Stiles. Newton Mr. Sutcliffe
Dr. [illegible] Professor Clerkes
for electric motors drills. showing
connections each dynamo. and
time worked by cases in
various usage & application Bottle
Dto. Sp.

Tuesday July 27

Visitors Prof Barker & friend [illegible] [illegible] [illegible] [illegible] [illegible], [illegible]. [illegible] [illegible] & [illegible] heater,

Lamp [illegible] [illegible] [illegible] [illegible] with intention to try to [illegible] the carbon with carbon vapor from carbon [illegible] [illegible].

Blackman [illegible] tried [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] water.

Carbonization with powdered coal and paraphine in moulds, to learn whether the Hydro carbon will unite with the vegetable carbon similarly to the union in kerosene, [illegible] with [illegible] [illegible], were first class. 1

Galvanometer test made by Upton on the Bast regular [illegible] page 53 [illegible]

Test of Bast lamp carbon from new [illegible] 120/15 ohms, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] 67 [illegible] [illegible] page 57 [illegible]

Carbon, [illegible] floated in Kerosene in the moulds, came out good, did not appear to have absorbed much hydrocarbon,

One in coal dust, [illegible] [illegible] [illegible] to naked eye, but under micro[scope] appeared [illegible] [illegible] [illegible] particles of coal, one in Paraphine, [illegible] [illegible] [illegible] [illegible]

Wednesday July 28.

Carbonization Mr. Batchelor continuing exp with Kerosene products, in carbon moulds. Bk 105 page 13 [illegible] [illegible] [illegible] [illegible] [illegible]

Lamp factory, Schmoyder putting in Dore [illegible] blowers & heaters, [illegible] putting [illegible] on pumps & connecting with [illegible] pipes,

Test separator, Mark tried the rotating [illegible] separator, satisfactory enough to warrant further trials with power [illegible] [illegible] to [illegible]

Motor at Lamp factory [illegible] tried, worked good no loss of power

R.R. Thermodynamic currents applied to
Rail road, wire, gauge & plus. See
work on Dynamics.

Telephone, wires run and communication
opened between office & Hickey's St. Office by
Miller.

Roller Mill, drawing finished by Mr. Claude
Slides given to Telephone man. Mr.

Thursday July 29.

Rails, in Saturday top connected up
room to electromotive room. room 8 feet long.

Roller Mill. Slides All working more
or less to the opening of Claude's Roller
Mill, Lines covered with clean.

Dynamo Shaft cut by change wrong
gear removed and Fabricator made and
a smooth Dynamo set up.

Filling Carbons Mr. E. gave Robinson
which to make adjustable for holding carbons
carbons.

[illegible]

[illegible] 78 ohms on 71 candles connected to Green
Resistance Box No 112 page 696
Page page they above the middle to carbon
gas pipe attached to burner and gas
lamps in other rooms see book.

Friday July 30

Papers Herald to day has very
favorable notice - first rendering
concerning the behavior of the
lights in Mr. Edison's Laboratory

Carbonizing. Some carbons made with
Kerosene gas passing through moss
came out beautifully silver gray.

Magnetic cutter. Test of Bragmann & Mc. Rob
B37 page 2558.9a.

Dutch oven Bronzes. Men detail work and furnace appears completed.

Wire insulation. Boys winding tapes from Knotts. Muslin & tar, covering winding for now 25 min sections.

Dynamo pipes. Run from small engine House to and connected 15 main from pipes running through Laboratory Lib.

Benzene vapor. Lamp has been attached for which was put benzene on and Kaffer vacuum was tested 17½ ohms 72.5 Volts 1300 ft lin at 16 candle very inconvenient. Book No 112 page 89

Lighthouse. Order given to run again all night.

Hydro carbon. Long globe made used sulphur & sulfur fumes sealed on for passage of gas within glass tubes quite for runs one 15 cm of globe, gas let at outflow and convert part in carbides in globe, quality augmented by the hydrocarbons.

Dynamo. Fourth opinion running for current for pumps.

Visitors. Miller & Potter of Brial for alarm indicator. Pond.

Saturday July 31

Morning. About two the 12 pair read at Lamp Factory for vacuum, pumps.

Rails insulated in laboratory yard with muslin cloth and iron washer under spikes.

Gas. Carbonized furnace set up in Chemical Laboratory.

Gasoline Dates 6th Carbon Lamp Indices
Least eighty 160 candles 90 ohms 88.2
volts 2.6 per lamp. Book No 112 pg 99

Wires gained for mr. Edison & Sawyer & Man
Bazin & Sawyer Incandescent Lamps carbon
made by Edison & Anderson Making
carbon formers, dipping frame for the
Sawyer carbon holders, Bracket for
Gasoline burner, Holder carbons and
Porcelain, Holder wire for dipping
Showing Sawyer carbon, Cement glass
Bending Glass holder, or form for
Bedding glass with carbon, Recess
making filter former for carbon, Sawyer
Make filter for glass Waiters at Lamp
Fusion, Bender for spring wrapping
Staining 25 wire carbon Carpenter
Ab roots on Large Magnets separates

Absent Mr. Batchelor & Edison Laboratory
Kept on $2.00

Monday August 2.

Filter letter, and theater tickets, folding mounting
holders gave error in bottom of box and
Gauge 012 centers in opening of box so by
passing the glass along the filter, any variations
on the filter may be shown by the magnifying
glass, closed by Batchelor Book No 106 pg 86

Make at Lamp factory, Wire for carbon, Stay

Gasoline Carbon made Filter, Porcelain
Experiments Ab 72 a Laster only to Mon

Calcimeter test - made of a lamp, after turned
to place in oral box and again tested
in calcimeter, same results.

Lamp test use about 4 weeks over last
The lamp shows Burning, continued

Lamp 6th filter Bamber burned 5.24 Cm
Nearly 7 per h.p. 71 candles

Tuesday Aug. 3.

Papers Headed by Today were sketch and comments of the Edison & Kapline Saison Experiment and some with artists on Arcas Navigation

Engine Hood left this A.M. and Mr. Lee has been engineer to day.

Gas furnace not enough air black from Nonon glass furnace [illegible] bellows [illegible] and furnace heated

Mercury, flasks were brought up to Mechanic shop & [illegible] the [illegible] started

Research Dr Mack has been engaged nearly a week on drawing for the drawing on subjects connected with the electric light, carbon, vacuum, &c.

P.D. drawings. carbon formers, double [illegible] lamp lamp with straight carbon, one with two straight carb clamps at top [illegible] for carbonizing in [illegible], some carbon

2 carbon loops at right angles, wires welded in ends of mercury tube, wires through small double sealed glass

Wednesday Aug 4.

Mercury Bromine [illegible] Dr Mack, Dr Mathews [illegible] at work on it.

Double Receiver [illegible] straight matching a double [illegible] for [illegible] Barnes & Stone making another [illegible] furnace on platinum for drawing down

Barrow from gas furnace [illegible] 103 [illegible] ohms - 48c 1616 ohms

Fellow accidentally [illegible] 112.09 - 20.68

[illegible] tube through furnace with [illegible] & 5 good carbon gutters [illegible] in [illegible] along.

Carbon straightening [illegible] [illegible]

Thursday Aug. 5.

Patent issued to day describes, Stephen Gordley, Fulda Illinois engineer, Patent issued Aug. 13. application filed June 9. cannot find it to have been filed over 1 yr ago.

Mercury pumps at Lamps factory are worthless at some joints leaked badly, Bolts corroded not affected the pumps where mercury was.

Electric lights work on driving wheels inferior on rails. Book 135 page 65 to 68 date Aug 3. discovered to day.

Harrison, Condoleezza assuming claims Stevens Peak work book 8 1511 condoleezza book No. 112 page 213.

Friday Aug 6.

[illegible] Skelton [illegible] new pump

[illegible] on Leaning Tower and the Lift vault cases by Mr. Book 106 page 554

[illegible]

[illegible]

[illegible] Telephone Receiver [illegible] nothing [illegible] Gears on the [illegible] Receiver.

Friction Rollers for transmission of Powers designed + sketched by Herring Book No 101 page 11 Rec

Steiles Valve, Bobbard, [illegible] Cast.

Wilbur + Ogston cast on shaft vest.

Saturday Aug. 7

Expanding the [illegible] magnet
Takes out and reverses.

Visual Indicator, brought (another)
Lynn set up by McGinnis

Mistograph receiver tried worked well
Have hope & determine to be
modified.

Work general of work. Lane drawing
coal and pumping car of Barn
laying on sidings, All removing
and putting sewer gear in the
receiver. Stain on Wendy frames &
Nerves for dressing Jambos. Mrs
Batchelor on carbonizing and
applicates for optic [illegible] fitter
Mr. Weller on most of the cases
getting up specifications. Mr. [illegible]
Davis [illegible] was made [illegible]
for carbonizing.

Sunday 8 Aug.

[illegible] general and thoroughly cleaned
[illegible]
[illegible] also here will arrange for [illegible]
[illegible] up again.

Carbonizing. Mr. Spencer describes the
[illegible] of the apparatus [illegible]
[illegible] to dissolve carbon and remedy the
[illegible] of the [illegible]

Monday Aug 9.

[illegible] & [illegible] in the morning
Cleaning up boilers & boiler house.
Retiring the work [illegible] the [illegible]
furnace [illegible]

Carbonizing. Mr. carbonizing [illegible]
General at [illegible] & Work
[illegible] up boiler & furnace at Lamp [illegible]

Locomotive Logan at work. [illegible]
Beaver the Locomotive.

Saturday the Eng. Hiring Meeting [illegible]
[illegible] Gas [illegible] the [illegible]
[illegible] Hiring [illegible]

Tuesday Aug. 10.

Serial Letters received from Bugmann

Motion to lay the "Applicability of Direct Rational Instruments" on the table

Coal dust. Furnace [illegible] Stand [illegible]

Gas Air &c. below grate bars and on [illegible] as soon as grate bars [illegible]

Report on low [illegible] after burning some time [illegible] & examined under [illegible] Pl. 12 Fig. 1

Wednesday Aug.

[illegible] Wm. Lane & [illegible] [illegible] well & [illegible]

Engine [illegible] steam from [illegible] the Rust Burner

Work. [illegible] to show [illegible] Clay & Marble as long as [illegible] card [illegible]

Blower. Rest [illegible]

Lamp [illegible]

Tables Referred of Times Absent [illegible]

Lamp. Notes of preliminary [illegible] and [illegible] to be [illegible] on Friday if possible. Pl. 11 Fig. 2 & 3

Thursday Aug. 12

Capture. Hexane 15 day [illegible] Lamin [illegible] to show [illegible] of the [illegible] tables [illegible]

Mercury Pump. Some [illegible] to be turned into [illegible] Cocks on Torr's pump.

Coal dust, sent this A.M. for engine [illegible]

Blower for [illegible] & [illegible] them. Adjourned 3 P.M. [illegible]

Telephone Call. Bergmann made the alteration suggested here some days ago, on his call and connected telephone. sent here and tested by Mr. Upton, works O.K.

Absent Mr. E. in N.Y. all day. Mott in New Brunswick, all day.

[illegible] Box, Ott making working drawing for call box for Post Indicator, in telephone system. [illegible] call day [illegible] [illegible]

Carbonizing. In Mr. Batchelor's experiments did not solve the problem [illegible] the cause of the [illegible] [illegible] [illegible] a thorough discussion to night it was suggested to be due to the one side [illegible] outside of bamboo being [illegible] grained than the inner side. [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] were taken to be arranged to hold the carbon [illegible] [illegible] [illegible] [illegible] [illegible] come on inside or outside of loop. O.K.
Book No 135 page

Friday Aug 13.

Moulds. Andrews changing all the moulds to hold the [illegible] up for carbonizing.

Meters, Mr. Edison, Mott [illegible] and [illegible] [illegible] [illegible] [illegible] of Meter Book No. 132 pge 1 [illegible]

Absent Mott at New Brunswick and finished up work [illegible] in Book 136 pge 1 &c.

Saturday Aug 14

Patents; [illegible] [illegible] Dyer and [illegible] the specifications of Electric Rail Road application for foreign Countries.

Furnaces. [illegible] sent to Woodbridge to order three gas furnaces with hole in top instead of side of lid, and bands to be [illegible] around, they expect the [illegible] in 10 or 11 days.
Gas apparatus [illegible]

Mr. Cox commenced the Balloon drawing.
Experiments to determine cause and
degree of heat in burning carbon
fuel, tending to show that nitrogen
is the cause of the locomotive. Burning the
fuel in presence of coal dust & gas
Mr. Cox testing the blower and gas
machine. Mr. Evans factory better. Mr.
Rise windows & Underwood work finished
drawing. Mr. Rise
on the second days the [illegible]

Sunday Aug 15

Letters Hon. B. Wade & Sundry of a
Rescinder letter various before. Visited
Stable for Caveat drawings to the Mar.

Monday Aug 16.

Factory, Bloody det. Mr. & eight boys
Kat. where cutting bamboo &c.

Coal dust: white burning on dust & coal
dissolves in experiment in burning [illegible]

Made in Vacuum. Mr. Cox has bottles made
and finished in separate vessels to be exhausted

Coal dust: gas for under boiler
Refuse for burning coal & dust will
be discovered with gas present.

Letter Dean finished. Letter for bamboo
in whole. The tinge is secured as a knife
& slide in carriage to be forced down by
wedge and nailed by being in a split
bamboo piece, so split between two double
nails together by two stiff springs

Tuesday Aug. 17.

Nitrogen experimental. Burning in presence
carbon covered and after burning, one tube
gas, other in presence with glass
burning & blower burning about
half hours before burning carbon

Gas treated same as Sunday had
[illegible] made of gas generator smaller

Some tube bottles gas & air [illegible]
for the carbon [illegible]
[illegible]

Wednesday Aug 18

Received two boxes glass from Lorring

Received a supply of candles. Also 4 pkgs Lamber, oil early [illegible] ordering 6 [illegible]

Went to Edison & Leave on 7.20 train 25 Pkg

Bamboo cause not be slaughtered

Platinum wire under 124 lbs pressure in stream of the steam

Receiver, Wire & Wade should for as pressure to be used in lamp and at same time to put on 75 current for carbon

Fisher Lamp, 1 set, same for fuse to be sealed in vacuum

Carbon, spiral cut 8 x 16, in lamp should very evenly

Bakers. Fist experiment in lamp bottom
Received by Van Olive Bean, rent of 12 to
Monday & dinner not found.

Found lots, with a number of lamp
glass [illegible] lots, some [illegible]
Ap 32 candles in [illegible] To see

Use of wheels Carbon [illegible] bad

Some of the lamps broke 5 x 8 [illegible]
[illegible] for vacuum, unsafe and
[illegible] with [illegible] glass
[illegible] when the glass [illegible]
[illegible] the wires.

Bamboo Exp. Mr Bastian placed two pieces
bamboo [illegible] in carbon plate under [illegible]
gas jets [illegible]

Platinum Fire of Platinum wire in [illegible]

Thursday Aug 19. 80

Allen Davis [illegible]
Alex Frace, Hospital [illegible]
at-works by Holger in Factory

Annalan having the very light work of supplying the Ship's time leaves off this morning, no estimate examination could wait the point

Test Bell 102 for 72 Sections of Partitions
Hand Made by [illegible] [illegible]
Tube for bending [illegible]

Test lamp with carbon 5 ft 10 lb c.
Result 210 Chinese Lanterns, 48 [illegible] 52 a.
188 Chinese Rockets 56 per [illegible] 104 pg

Friday Aug 20.

Annalan, Lincoln, armature
Planned out in same machine
on the one in yesterday.

Lang's machine work [illegible]
Forrest and Lage [illegible]
work commenced in [illegible] in [illegible]

Allen Lecture of [illegible]

[illegible]

[illegible] for [illegible] to have
[illegible] to be the [illegible]
[illegible] Gradually [illegible] the [illegible]
[illegible] of air [illegible] the [illegible]

[illegible] Allen [illegible] Vessel [illegible]
[illegible] in [illegible] to [illegible]

Saturday Aug. 21. 80

Connection, great care to secure same
Joined drum. Removed to Stage
Turned out some Sawdust left.

Bilinguadilis or Oscillating Experiment
Great by Dr. Gavel. by reading Scientific
Work. Consult on great pons
Asinorum during [illegible]

Ultraguard, Mrs gearing starting
Locomotive Cause Working Stop
putting former Cannon Working
Gensen Harness, Mr McKenzie
Pay and Bev per hour indicator. 2
Editor Working Connections for a
Stopping Motion in Mr. Cutler's
according to Sparrow Hymn 154 to
Mr. Spalding Sculptor Lowering
starting of Lamp Lastay

Absent. Mr Dean second Cashier
Park in Observer

Monday Aug. 23

Drama Stroke, Mr. [illegible] [illegible]
All day yesterday Mr. & Mrs. [illegible]
with the heavy Angel and Large Lady
[illegible] Drama [illegible]

Cubic high Station Mr Henry finished
Models of Stone fitted with Tube [illegible]
Drama Engine

Locomotive Cause [illegible] passable
Friction clutch of alcove [illegible] ring
[illegible]

Formalize [illegible] in Some magnet
time successive [illegible]

Little, Swift and other men bolt and
[illegible] Power in evening Mrs putting
[illegible] bellet

Visitors. Mr Edmond and a friend
[illegible] Bacon

Tuesday Aug 24 1880

Pump. Bakin. Mach. Jones of single bits
Brittania gauge.

Carbon tester. Now being used and serve
the purpose very well

Blacksmith. Office used as usual Saturday
and was putting up lamp in Roundhouse
from Morning gauge

Fireman Lacum. Pump in Cabooses, Day
Fire 2 M. Schoolding one use Green
Good, set fire bet. Gouverneur

Painting. Mr Wine.

Short carriers in cars leaving to
the east over tracks

Wednesday Aug 25

Pump. Pump not [illegible] starter,

Locomotive. Engine [illegible] over out.
improve the district,

Milling. Weather fine getting up
the weather disorder & the work

Bridge Painters. Painting bridge

Bridge was open for [illegible] 30 page
[illegible], on the other, see Engineers
letter,

Camp Scott. Engineer and shelter
by Mr Barstow Bots No. 105 page 97 Ex.

Thursday Aug 26

Combination Gas Machine from Detroit
X Michigan recd at Lamp Factory.

Pumps. Hill and pump men
X cleaning the mercury [illegible] preparatory
to starting pumps at Factory.

Nickel clamps. New Lamps made and
X tried.

Glass blowing, Boehm with his
X tables &c, moved to work up stairs
in Lamp Factory.

Building. Mr. Edison sketched plan
X for building 36x25 supplemental
to factory.

Friday Aug 27

[illegible] Heard article from Sager Higgs in
reply to Sawyer of a recent date.

Machine for clamping carbons devised and
sketched by Mr. Batchelor Book 105 page 107.

Albert Upton sent from [illegible]
[illegible] standard [illegible]
[illegible] in [illegible] & [illegible] and all
kinds of [illegible] woods &c.

[illegible] Experiments on
insulating materials such as [illegible]
tar, paraffine & linseed [illegible]

Electro Motive force, Mr. Edison & Upton
discussing ways [illegible] and [illegible]
for determining the electro motive force
lines and for equalizing the same
in different [illegible] leading from
Station. Mr. E [illegible] several [illegible]
marked for [illegible], could not get
them to determine their value on
[illegible] decomposition.

Saturday Aug 28.

Saturday, Aug. [illegible] 1880

X [illegible] Email [illegible]

Patternmaking finishes [illegible]

X-1 Hogs for [illegible]

Connection. Mus and [illegible]

Kneeing [illegible]

Men. [illegible]

[illegible] working on Clamp Machine

[illegible] Bench center.

X [illegible]

[illegible] of [illegible]

N.W. Clarke in [illegible] Connection

for large Machines. [illegible]

to implore the [illegible]

[illegible] Connection. [illegible]

[illegible] conductor for Backent

Sunday Aug. 31. 80

[illegible] Sabbath afternoon

Inundation. Men digging trench

[illegible] New Dwelling [illegible]

[illegible] Sabbath.

[illegible] Mr. [illegible]

[illegible] Clas Machine [illegible]

[illegible] passing up [illegible]

[illegible] a good [illegible]

[illegible] Dog, by [illegible]

[illegible] crossing first-class.

[illegible] Prof. Thomson, [illegible]

[illegible] of [illegible]

[illegible] inundation, Mines [illegible]

[illegible] Dam for [illegible] in inundation. Bow [illegible]

[illegible] 100 [illegible]

Wednesday Sept. 1. 80

[illegible]

Thursday Sept. 2.

[illegible]

Friday Sept. 12. 80.

Marvin Sump & Lamb sawing [illegible]
Running inside [illegible]

Sold similar to [illegible]
Up steamer by [illegible]
indicator of steam [illegible]

Condenser [illegible] Shipping
Platform for condenser, and
Brackets in hole for light [illegible]
for [illegible] and [illegible] commencing up
machine in [illegible]

Discussions some [illegible]
Stuff in boiler [illegible] of [illegible]
[illegible]

Tube [illegible] made by Dion and
[illegible] use a simple [illegible]
bought up for [illegible]

Saturday Sept. 13.

[illegible] divided by [illegible]
[illegible] from [illegible]
[illegible] to [illegible]

[illegible] Sump & Lamb [illegible]
[illegible] Sawing [illegible]
[illegible] Lining [illegible]

[illegible] Horse [illegible]

[illegible] Sump [illegible]
[illegible] passed [illegible]
[illegible] Frame

[illegible] Equal. [illegible]
[illegible] locomotive [illegible]
Clamp machine, Steam [illegible]
[illegible] Sump [illegible]
[illegible] Sawing, Steam Lamb [illegible]
[illegible] Lining [illegible]
[illegible] after 2 weeks absence

Monday Sept. 6 [illegible]

Wilder Bros. Circus & Caravan

Lorenzo Lewis to Society [illegible]

[illegible]

Henry Grewell [illegible]

Lady both arms of [illegible]

[illegible] up to [illegible] with [illegible]

Gentlemen, [illegible]

[illegible] Society [illegible]

[illegible] for all [illegible]

Miss [illegible] holding [illegible]

Hand holding for [illegible] Morning

by Andrews

Carter Bros. Show [illegible]

[illegible] for [illegible]

Tiger Another [illegible]

[illegible] and [illegible]

Tuesday Sept. 7

[illegible] Stone [illegible]

with [illegible]

[illegible] Morrow [illegible]

[illegible] up [illegible]

[illegible] Andrews [illegible] up & [illegible]

[illegible] Mill,

[illegible] for Miss [illegible] to [illegible]

Large Horses [illegible] forging [illegible]

[illegible] side [illegible]

[illegible] making [illegible]

Wednesday Sept. 8

Agreement. Copied Agreement Sept. 8, 1[illegible]
Shiderman [illegible] of Indigestion and growing
[illegible] weight [illegible] 12 Sept.
[illegible] Justice [illegible] County [illegible]

Fifty Camps. Making [illegible] claims [illegible]
[illegible] Civil Service in [illegible] matters, [illegible]
[illegible] against [illegible] claims [illegible]
claims [illegible]

Bill Adams. Most [illegible] of [illegible]
Hermes. [illegible] Camp [illegible]
[illegible] and a [illegible] of his own [illegible]
[illegible] the [illegible] is [illegible] each
time the Camp is [illegible]

Keels [illegible] Bk 187, pg 103

Thursday Sept. 9

[illegible] Sun. Full description of the
[illegible] and [illegible] [illegible]
Mr. E. has brought [illegible] and
[illegible] for the [illegible]

Visitors of Mr. Nelson [illegible] to
[illegible] family, [illegible]
of Sept. [illegible] absent on [illegible]
in [illegible] Grand Jury

Station [illegible], Edison & Upton [illegible]
the [illegible] of [illegible] from [illegible]
[illegible] since [illegible] a great number of
[illegible] of doing it [illegible] by [illegible]

[illegible] so [illegible] with [illegible]
[illegible] beyond all expectation [illegible]
[illegible] from all [illegible]

[illegible] Dean [illegible] of [illegible]
[illegible] to [illegible] of [illegible] of sawing
[illegible]

Heavy [illegible] to roof for [illegible]

Thursday Sept. 10

Factory, sharp beam, secured to the roof on which to attach hoisting apparatus

Pump Motor, working very satisfactorily. Spur pump chain broken several times. Necessitating stopping and moving back a little to disengage. tested 38 carbons, got 27 candles.

Boilers. Absence of Smith and not got yet. Factory.

Fixtures. Johnson procured gas chandelier left at Westbury. Tests of electric fixtures since experiments on different means of arranging them.

Patent. Edwards & Co's English No 15 on dynamos for current & motors

Saturday Sept. 11.

Dynamos. Smith, Sawdite & Edison with employing men and are employing nothing

Factory. pump tower repair to create earthing of the chain. Elec. arrangements & hole. pulleys with brake and sheaves with necessitate letting out one pressing, shutters & holds put down four cases to conduct away gas & heat

Gauge. Dynamo. Casting for base is used

Drawings. Mott finished Set of specifications of Dynamo machine drawn by Rowland. one small one of which is left here by him on his late visit.

Work General. Mr Little on cell. specs, a number of the Maximum Dean one clamp machine and Edw. cutters, Mr. Batchler, making efforts to get Factory started, Co. W. Shaw on cut station connections etc.

Monday Sept. 13.

George planer. Foreadmen made
X Continued at work to day.

Power pump. refitted yesterday, put
X up and set. satisfactorily working
to day.

Gas Washing Machine made by Frey
X tried to day, but did not work
up to expectation. Mr Evans
sketched another working in center
principle Book No 16 page 7

Opinion Mr Clarke for Priceder
X to note progress of Peter Collins Esq.

Tuesday Sept. 14.

Letter books made by boy of English in
system to manufacture Electro Machine and
commence today.

Today, Gas Machine taken out to clean pipe
and repair. Pump action satisfactory and
the letters books large embroidery working
by machinery fair.

Jobbing little engine maker Mr Wm Reed
Johnson Book 163 page 18 date.

Mr Wm Maj Eaton

Wednesday Sept. 15. 80.

Gauge No. 18. 1877. 3. 25. was taken off the Dynamo on Tuesday, this at 8

Large Dynamo. Fine castings used Kola Engine turning the magnet pole.

Mulvey, Manager of English Patent Sub Office Museum Square went to N. Y. in afternoon.

Thursday Sept. 16.

Factory. Pump started again this afternoon, and running satisfactory.

Planer, the large planer gears gnawed, started, & new chain and spindle lifting arrangement put on planer.

Large Armature, Worthington pulley out out. the pattern and by Clarke.

Friday Sept. 17. 80

Roller bearing, South Ken with patent roller bearing,

Patent finished English & completed from American Nos 210, 215, 216, 218, 220 & 227, 228, 229, 230, 238, 239, 240, 241, covering 58 pages and making 161 claims on Camps & various ways of manufacturing.

Dynamo left price for Magneto, book of large planer 5 to dynamo down, cutter hardly, and pulley Takeoff boy to remedy it.

Factory, Pump works good this morning, when it again caught fire, & had to be taken out and replaced with, worm or screw pipe, made.

Case for, Wheel Alt finished a simple with cylinders, brackets & plates, work & accurate way

Saturday Sept. 18.

Mr. Garrick Part. work Experiments continued in insulating materials

Mr. Batchelor at work at Power Pump at Factory, insufficient power

Boring at work reliable, Upton

Kat. work on Station Conductors

Smith commenced in wooden factory circuit of large Conductors connection, to commutator, Logan on castings of large Engine, Dean assist assistants on blamp Pitcher and filter frames,

Gas data. Russell brought in meas of Gas & Power data. of the Heads

Pat. Drawing Mott finishing drawing of Vacuum meter. Stones making on to dep. mite

Condensers, Mr. Kimball clamp lens, with preparation made on table. Noted Friday

Wednesday 22-9-80

Absent, Mott absent since Saturday night last night, lower Pitch Mr. Keene was in Arcada yesterday order and see about presses to screw pump. Mr. Clarke also in New York to see, rotary high speed engine on exhibit at American Institute fair.

Mr. Barker Read during my absence Portable Boiler Kettle and work for boring the lens etc.

Pictures, Also read during my absence a Lecture, chandelier & the colored globes, for experiment on work lamps,

Mr. Pumpkin Long "letter part in Cotton Paper, soldering Mark, dep. to Pump place of Short nipples from Cotton

Station, Commenced work on circuit Station from end of Large

Medical No. 1141 112

Eye tests 137

Abe Examination Wassels Blood Cells 5 ✓

Urine in Bombs 113 ✓

Urine 132 ✓

Sight Record 123 ✓

Hearing Machine 116 ✓

Blood Machine 57, 102, 108 ✓

Blood Book Parts 167 ✓

150 ✓

Skulton Condition 127, 160 ✓

Urine Sym. Ignition 151 ✓

Teeth inoculation 104, 137 ✓

Pitten Examination 153 ✓